BOOK OF LOOMS · VOLUME ONE
MEASURED DRAWINGS

The Fly-Shuttle Pit Loom

A scaled orthographic plate set

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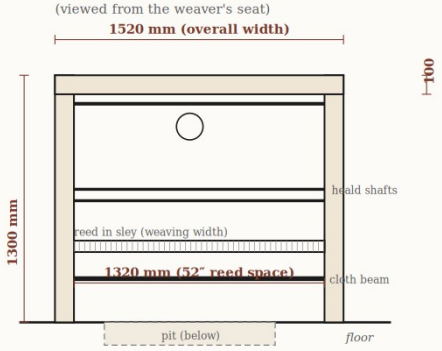
Plate 1 — General arrangement: front, side & plan (scale 1:20)
Plate 2 — The reed: full elevation & enlarged dent section
Plate 3 — Sley & fly-shuttle assembly

All dimensions in millimetres. Based on the standard 52-inch reed-space fly-shuttle frame-and-pit loom. Body-fitted and regional dimensions vary.

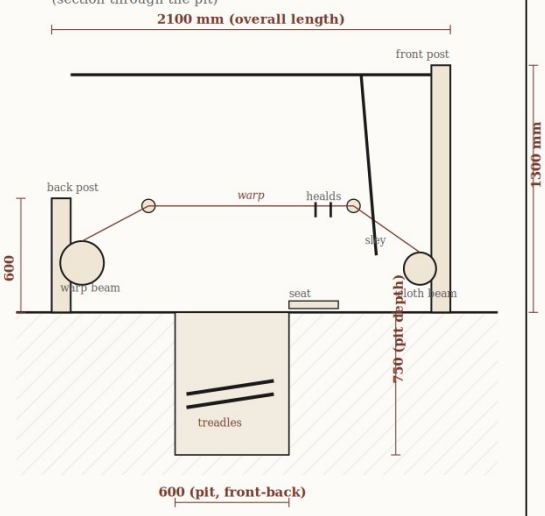
FRONT ELEVATION

(viewed from the weaver's seat)



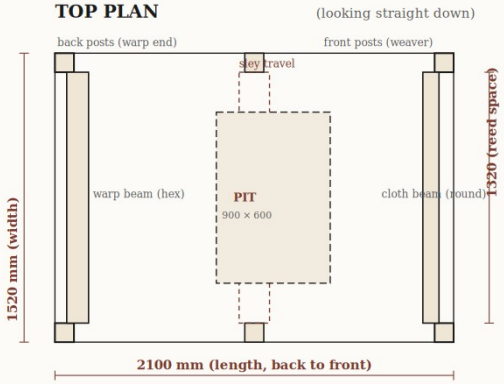
SIDE ELEVATION

(section through the pit)



TOP PLAN

(looking straight down)

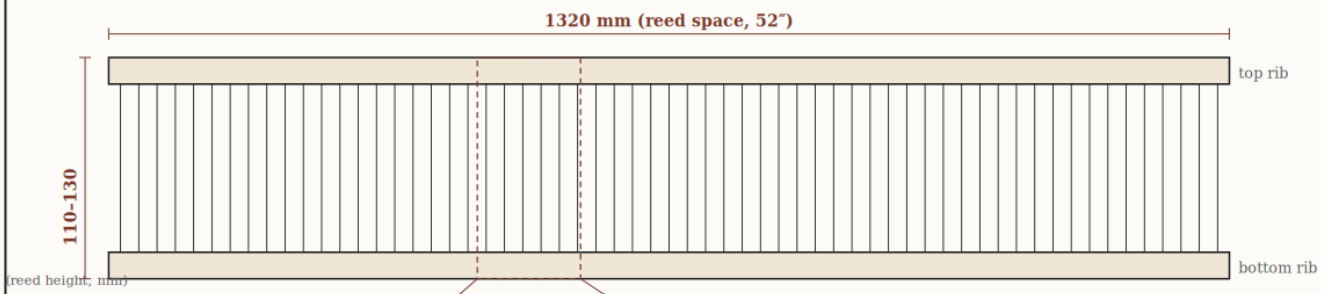


SCALE 1:20

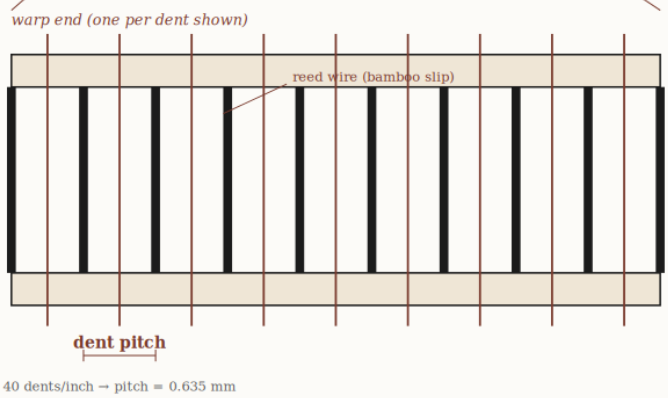
0 — 500 — 1000 mm

FLY-SHUTTLE PIT LOOM — 52″ REED SPACE
Orthographic plate: front, side & plan
Book of Looms, Vol. I · Plate 1 · dims in mm · scale 1:20

THE REED — FULL ELEVATION



ENLARGED SECTION A — dents (scale 4:1)



40 dents/inch → pitch = 0.635 mm

Setting the count

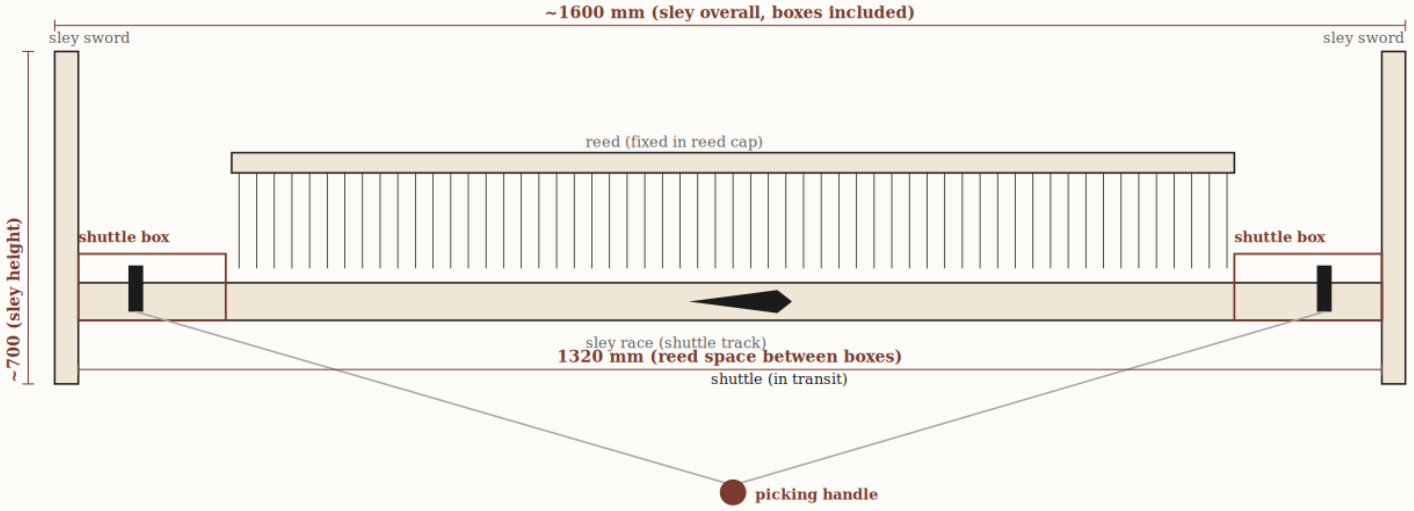
EPI = dents/inch × ends per dent

e.g. 40-dent reed, 2 ends/dent = 80 EPI

REED — DETAIL PLATE

Book of Looms, Vol. I · Plate 2 · mm

SLEY ASSEMBLY — FRONT ELEVATION



FLY-SHUTTLE — PLAN (scale 1:2)

Working stroke

1. Press treadle — open the shed.
2. Jerk picking handle — shuttle flies the race.
3. Pull sley — reed beats weft to the fell.
4. Change treadle — lock weft, swap shed.

Lift · throw · beat — repeat.

SLEY & SHUTTLE — DETAIL PLATE

Book of Looms, Vol. I · Plate 3 · mm